

What is claimed is:

1. A disk array device comprising:
  - a disk array device housing;
  - plural disk device housings which are stored in the disk array device housing and incorporate plural disk devices; and
  - a controller housing which is stored in the disk array device housing and incorporates a controller for controlling reading and writing of data with respect to the disk devices, wherein the respective disk device housings have plural connectors for connecting cables for fiber channels and plural lighting units corresponding to the respective connectors, and the controller controls lighting states of the lighting units in accordance with a connection order of the cables.
2. A disk array device according to claim 1, wherein the respective lighting units are provided in a fixed relative positional relation with respect to the respective connectors.
3. A disk array device according to claim 1, wherein the controller housing and the plural disk device housings are connected to a LAN cable, respectively, and the controller performs control of the lighting units via the LAN cable.
4. A disk array device according to claim 1, wherein the controller performs control of the lighting units via the cables which have already been connected.

5. A disk array device according to claim 1,  
wherein the controller reads a connection information  
file defining the connection order from a predetermined external  
apparatus and performs the control on the basis of the connection  
information file.

6. A disk array device according to claim 5,  
wherein the external apparatus comprises a connection  
information file generation unit which generates the connection  
information file on the basis of information specifying the  
number of disk device housings provided in the disk array device,  
the number of disk devices incorporated in the respective disk  
device housings, and structural specifications of a RAID.

7. A disk array device according to claim 1,  
wherein the controller specifies connectors, which should  
be connected, according to a combination of housing information  
specifying the disk device housings and path information  
specifying the respective connectors in the disk device  
housings.

8. A disk array device according to claim 7,  
wherein the controller acquires the housing information  
and the path information prior to the lighting control.

9. A disk array device according to claim 1,  
wherein the controller is capable of detecting  
abnormality of a connection state of connectors which are  
connected in accordance with the connection order.

10. A disk array device according to claim 1,  
wherein the controller is provided in a plural form,  
the respective connectors are associated to be connected  
to any one of the controllers, and

the respective controllers perform control of the  
lighting state individually.

11. A connection support method for, in a disk array  
device storing a controller housing and plural disk device  
housings in a disk array device housing, connecting connectors,  
which extend over the plural disk device housings, with cables  
for fiber channels,

the controller housing incorporating a controller for  
controlling reading and writing with respect to the disk devices,

the respective disk device housings having plural  
connectors for connecting the cables and plural lighting units  
corresponding to the respective connectors,

the connection support method comprising, as steps to  
be executed by the controller:

a step of recognizing the plural disk device housings  
stored in the disk array device housing; and

a lighting control step of controlling lighting states  
of the lighting units in accordance with a connection order  
of the cables on the basis of a result of the recognition such  
that the disk device housings are connected in a connection  
state defined in advance.

12. A connection support method for disk array devices according to claim 11,

wherein the respective lighting units are provided in a fixed relative positional relation with respect to the respect connectors.

13. A connection support method for disk array devices according to claim 11,

wherein the controller housing and the plural disk device housings are connected to a LAN cable, respectively, and the controller performs control of the lighting units via the LAN cable.

14. A connection support method for disk array devices according to claim 11,

wherein the controller performs control of the lighting units via the cables which have already been connected.

15. A connection support method for disk array devices according to claim 11,

wherein the controller reads a connection information file defining the connection order from a predetermined external apparatus and performs the control on the basis of the connection information file.

16. A connection support method for disk array devices according to claim 15,

wherein the external apparatus comprises a connection information file generation unit which generates the connection

information file on the basis of information specifying the number of disk device housings provided in the disk array device, the number of disk devices incorporated in the respective disk device housings, and structural specifications of a RAID.

17. A connection support method for disk array devices according to claim 11,

wherein the controller specifies connectors, which should be connected, according to a combination of housing information specifying the disk device housings and path information specifying the respective connectors in the disk device housings.

18. A connection support method for disk array devices according to claim 17,

wherein the controller acquires the housing information and the path information prior to the lighting control.

19. A connection support method for disk array devices according to claim 11, further comprising a step in which the controller detects abnormality of a connection state of connectors which are connected in accordance with the connection order.

20. A disk array device comprising:

plural controller housings comprising:

a communication control unit which is connected to a host apparatus and receives data from the host apparatus;

a cache memory which is connected to the communication

control unit and saves data exchanged between the communication control unit and the host apparatus; and

plural controllers which are connected to the host apparatus and the cache memory and perform control such that the data, which is exchanged between the communication control unit and the host apparatus, is transferred to the communication control unit or received from the communication control unit;

plural first disk drive housings comprising:

plural disk drives which are connected to a first controller housing among the plural controller housings with a first fiber channel loop and store data to be transferred by the plural controllers in the first controller housing;

first connectors to which the first fiber channel loop is connected; and

first display devices which are provided in association with the first connectors; and

plural second disk drive housings comprising:

plural disk drives which are connected to a second controller housing among the plural controller housings with a second fiber channel loop and store data to be transferred by the plural controllers in the second controller housing;

second connectors to which the second fiber channel loop is connected; and

second display devices which are provided in association with the second connectors.

wherein the plural controller housings, the plural first disk drive housings, and the plural second disk drive housings are arranged in an identical disk array device housing,

the plural first disk drive housings and the plural second disk drive housings are arranged alternately in the identical disk array device housing,

the plural controllers in the first controller housing perform control, in the case in which the first fiber channel loop is connected to the plural first disk drive housings, so as to light the first display devices of the plural first disk drive housings in an order in which the first fiber channel loop should be connected to the first connectors of the plural first disk drive housings, and

the plural controllers in the second controller housing perform control, in the case in which the second fiber channel loop is connected to the plural second disk drive housings, so as to light the second display devices of the plural second disk drive housings in an order in which the second fiber channel loop should be connected to the second connectors of the plural second disk drive housings.